

Spiritual Well-Being and Associated Factors with Relapse in Opioid Addicts

MOHAMMAD-REZA NOORMOHAMMADI¹, MASOUD NIKFARJAM², FATEMEH DERIS³, NEDA PARVIN⁴

ABSTRACT

Introduction: Opioid dependence relapse is a complex and multidimensional problem, and lack of spiritual well-being is a major concern in opioid addicts.

Aim: This study was conducted to determine spiritual well-being and factors associated with relapse among opioid addicts.

Materials and Methods: This cross-sectional study was conducted from April 2015 to September 2015. According to purposive sampling, 312 eligible addicted patients were enrolled in the study. The patients had at least an attempt of detoxification in the past six months and referred to an outpatient detoxification clinic in Shahrekord (Southwest, Iran). They completed Paloutzian and Ellison's Spiritual Well-being Scale. A researcher-developed questionnaire consisting of demographic characteristics and 20 questions about associated

factors with relapse was administered. Data were analysed by version 16.0 (SPSS Inc., Chicago, IL) using one-way ANOVA, Pearson's correlation test, chi-square, Friedman test, and student's t-test.

Results: The most important factors associated with opioid dependence relapse consist of relation with an addict friend, unemployment, living expenses, family conflicts, and somatic pain. In the present study, 157 patients had never experienced relapse while the mean of relapse in the rest participants was (3.25±1.53) times. Furthermore, the addicted patients with relapse had significantly lower scores of spiritual well-being and its subscales compared with non-relapse patients ($p < 0.001$).

Conclusion: The findings of the present study indicate the necessity of paying attention to spiritual well-being, family and economical, personal, and occupational factors as crucial factors in opiate addiction relapse.

Keywords: Dependence, Detoxification, Spirituality

INTRODUCTION

Opiate addiction is a serious disorder which affects communities' health [1] and increases mortality, morbidities, and other adverse conditions [2]. The number of opiate users increased about 18% from 2008 to 2013 in Iran [3]. On the other hand, relapse of addiction makes it a complex phenomenon because 50%-80% of patients return to addiction [4,5], which represents inadequate efficacy of the current opioid dependence treatments. Different factors are related to relapse of addiction such as insomnia, temptation, availability of opiates, mental disorders, active alcohol abuse and family conflicts [6,7]. Opioid dependence is considered a medical disorder with adverse health outcomes [8].

One of the new concepts that have been introduced into the definition of health is spiritual health. The spiritual dimension of health is an important part of health [9]. Spiritual well-being is an important aspect of human well-being which integrates and regulates internal powers and causes feeling of intimacy with God, self, society and environment. One of the major concerns in opioid addicts is lack of spiritual well-being [10]. Spirituality is an important factor influencing the decrease of substance abuse [11] and generally protects people against the initiation of alcohol and drug use [12].

Recognition of the causative factors in treatment of opiate dependency as a multidimensional problem is crucial [13]. Therefore, regarding regional differences in accessibility of opiates, religious beliefs, and socioeconomic status the present study was conducted to determine the addicted patients' spiritual well-being and their perspectives' about factors associated with relapse.

MATERIALS AND METHODS

This cross-sectional study was conducted from April 2015 to September 2015. According to purposive sampling method, the

eligible addicted patients using DSM-IV TR criteria [14] seeking treatment or follow up in a private withdrawal clinic in Shahrekord (Southwest, Iran) were recognized. Inclusion criteria consisted of opiates addiction and age equal or above 18 years, at least one attempt of treatment in the past six months, and willingness to participate in the study. Exclusion criteria were mental retardation and unwillingness to cooperate. The study was approved by the Shahrekord University of Medical Sciences and an ethical permission was officially obtained from the ethics committee (ethical code 93-12-18) of this university. This study was conducted according to the declaration of Helsinki ethical principles for medical research involving human subjects. The addicted patients provided informed written consent to participate in the study. During the study period, 320 eligible patients participated in the study. Eight questionnaires were incompletely filled out and finally 312 questionnaires were analysed.

Study Questionnaires

The questionnaires used in this study were Paloutzian and Ellison's Spiritual Well-being Scale [15,16] and a researcher-developed questionnaire. The researcher-developed questionnaire consisted of some questions about demographic characteristics of participants such as age, gender, duration of addiction, job, education level, and also 20 items about associated factors with relapse in four domains including personal factors with five items, occupational factors with seven items, family related factors with four items and economic factors with four items. This part of the questionnaire was developed using the literature review and similar studies [3,17,18]. Each item was rated 1 to 10; 10 indicated the maximum and 1 represented the minimum importance of item from viewpoints of patients. The questionnaires were completed by each participant under supervision of a psychiatrist.

The content reliability of the questionnaire was confirmed by 10 faculty members of Departments of Psychiatry and Psychiatry Nursing. The questionnaires were completed by 20 addicted patients at two stages (at baseline and after two weeks) and validity of the questionnaires was determined by test-retest (Cronbach's alpha=0.81), and these patients were excluded from the study analysis. Patients spiritual well-being was assessed by Paloutzian and Ellison spiritual well-being scale. The spiritual well-being scale is a general indicator of perceived well-being with 20 items in two subscales: religious well-being and existential well-being, with 10 items for each [16]. Generally, it measures the respondents perception of spiritual quality of life, and also the scores for subscales of religious and existential well-being. The religious well-being subscale is a self-assessment of one's connection with God, and the existential well-being subscale is a self-report assessment of one's perception of life satisfaction and life purpose [19].

The scales are rated from 1 (strongly disagree) to 6 (strongly agree). Scores will range from 10 to 60 on the subscales and 20 to 120 on the spiritual well-being values. The two values for the subscales are aggregated to represent the total score of spiritual well-being. Higher scores represent higher levels of well-being perception and vice versa [19]. Several authors stated that this test has good face validity [11,20,21] and satisfactory content validity regarding the items in the test. Ellison has reported that the correlation between the subscales for the 20 item version of the scale is 0.32 (p<0.001), the correlation between religious well-being and spiritual well-being is (r = 0.90) and between existential well-being and spiritual well-being is (r = 0.59) [19]. In Iran the result of a study conducted by Dehshiri GH R et al., showed that internal consistency and test-retest reliability coefficients of spiritual well-being are 0.90 and 0.85, respectively. The subscale reliabilities were acceptable. Explanatory and confirmatory factor analysis indicated that the scale had construct validity [22].

STATISTICAL ANALYSIS

The data were analysed using SPSS version 16.0 (SPSS Inc., Chicago, IL) by chi-square, Pearson's correlation test, Friedman

test, ANOVA, multivariate test (Wilks lambda), and student's t-test. In the present study, p-value less than 0.05 were considered as significant. Demographic and clinical characteristics were expressed by descriptive statistics (frequency, means, and standard deviation); for intergroup comparisons of characteristics, ANOVA was applied for continuous variables (among the three opiates groups) and homogeneity of variances was assessed by Levene's test. Correlations between the percentage of the addicts and the age at onset of addiction with spiritual well-being and its subscales were assessed by Pearson correlation coefficient test. The student's t-test was used for independent samples.

RESULTS

The mean age of participants was (35.12±9.25) years, and their average age at onset of addiction was (22.35±6.44) years. Results of the study showed that 72.1% of the participants were opium users. In the present study, 157 patients did not have any relapse in the past six months; however, 155 patients had relapse history in the same period. The average time of relapse in participants was (3.25±1.53). Other characteristics of the patients are presented in [Table/Fig-1].

According to the findings of the study, the average scores of spiritual well-being, existential well-being, and religious well-being were (76.09±17.56), (36.66±9.29), and (39.43±9.65), respectively. In addition, most (89.7%) of the participants had moderate level of spiritual well-being. Results of the student's t-test indicated that spiritual well-being and its subscales had no significant difference in gender (p>0.05); however, men had higher scores than women. Moreover, the addicted patients who were married had better scores in spiritual well-being and its subscales (p<0.05). Furthermore, the patients with simultaneous psychiatric disorders had significantly lower spiritual well-being and its subscales scores (p<0.05). Interestingly, the patients who lived in urban area had higher scores than those in rural area (p<0.05) [Table/Fig-1].

The ANOVA test confirmed a significant difference among various opiates users in spiritual well-being and its subscales (p<0.05).

Characteristic		No (%)	Spiritual Well-being Mean (SD)	Religious Well-being Mean (SD)	Existential Well-being Mean (SD)
Gender	Female	26 (8.3%)	74.11 (14.50)	37.80 (8.42)	36.30 (7.03)
	Male	286 (91.7%)	76.27 (17.82)	39.58 (9.75)	36.69 (9.48)
			p =0.54, t=0.60	p=0.37, t=0.89	p=0.83, t=0.26
Marriage Status	Single	129 (41.3%)	73.41(16.66)	38.20 (9.01)	35.21 (9.26)
	Married	183 (58.7%)	77.98 (17.97)	40.30 (10.01)	37.68 (9.21)
			p =0.024, t=-2.27	p =0.058, t=-1.93	p =0.021, t=-2.32
Location	Urban	276 (88.5%)	77.25 (17.49)	40.20 (9.58)	37.04 (9.35)
	Rural	36 (11.5%)	67.25 (15.61)	33.52 (8.10)	33.72 (8.44)
			p =0.001, t=3.26	p =0.043, t=4.54	*p <0.001, t=2.02
Education Status	Literate	(306) 98.1	76.26 (17.59)	39.54 (9.66)	36.71 (9.33)
	Illiterate	6 (1.9)	65.80 (15.35)	33.00 (8.33)	32.80 (7.82)
			p=0.187, t=1.32	p=0.133, t=1.50	p=0.352, t=0.93
Job	Unemployed or temporary job	297 (95.2%)	75.76 (17.17)	39.29 (9.53)	36.46 (9.10)
	Employed	15 (4.8%)	82.73 (23.68)	42.06 (11.79)	40.66 (12.21)
			p=0.279, t=-1.12	p=0.279, t=-1.08	p=0.209, t=-1.31
Previous Withdrawal Method	Narcotics anonymous group	76 (24.4%)	70.51 (18.97)	36.90 (10.58)	33.60 (9.92)
	Methadone maintenance therapy	236 (75.6%)	70.51 (16.72)	40.24 (9.20)	37.64 (8.88)
			p=0.001, t=-3.23	p=0.015, t=-2.46	p=0.001, t=-3.35
Concurrent Psychiatric Disorder	Yes	254 (81.4%)	69.67 (15.86)	35.63 (9.03)	34.03 (8.08)
	No	58 (18.6%)	77.56 (17.62)	40.29 (9.59)	37.26 (9.46)
			p=0.002, t=3.13	p=0.001, t=3.37	p=0.017, t=2.40

[Table/Fig-1]: Demographic characteristics of participants of the study for spiritual well-being.

* Student t-test ** p-value less than 0.05 considered significant

Domain	Items	Mean	Standard Deviation	Minimum	Maximum	p-value
Personal Factors	Relation with an Addict Friend	7.91	3.50	1.00	10.00	<0.001
	Relationship with Addicted Colleagues	5.26	4.17	1.00	10.00	
	Rejection from Friends and Community	4.03	3.64	1.00	10.00	
	Common Use of Opiates in the Community	4.71	3.88	1.00	10.00	
	Somatic Pain	4.31	3.57	1.00	10.00	
Occupational Factors	Unemployment	5.50	4.05	1.00	10.00	<0.001
	Lack of Interest and Job Satisfaction	4.34	3.68	1.00	10.00	
	Professional Problems with Colleagues	4.97	3.85	1.00	10.00	
	Lack of Permanent Job	4.54	3.79	1.00	10.00	
	Failure on the Job	4.09	3.61	1.00	10.00	
	Working Hours Too Long	4.19	3.74	1.00	10.00	
	Boring Work	4.34	3.80	1.00	10.00	
Economic Factor	Poverty	4.53	3.93	1.00	10.00	<0.001
	Buying and Selling Opiates to Earn Money	3.38	3.38	1.00	10.00	
	Cheapness of opiates	3.64	3.31	1.00	10.00	
	Pressure of Living Expenses	5.74	4.15	1.00	10.00	
Family Factors	Family Conflicts	6.51	3.16	1.00	10.00	<0.001
	Neglecting the Family after Drug Withdrawal	4.66	3.68	1.00	10.00	
	Having Addicted Family Member	3.51	3.04	1.00	10.00	
	Marital Conflicts	3.97	3.18	1.00	10.00	

[Table/Fig-2]: Participants viewpoints on associated factors in addiction relapse.

* Friedman test ** p-value less than 0.05 considered significant

Friedman test, there was a significant difference among factors associated with opiate addiction relapse ($p < 0.001$)

The results of LSD test indicated a significant difference between heroin and multidrug users (41.28 ± 8.27 vs. 36.00 ± 10.08 , $p = 0.02$) in religious well-being, and between opium and multidrug users (37.57 ± 8.96 vs. 33.77 ± 9.57 , $p = 0.004$) in existential well-being and spiritual well-being (77.74 ± 16.88 vs. 69.77 ± 18.78 , $p = 0.001$).

According to the results of the Pearson's correlation coefficient test, there was no significant association between age at onset of addiction and spiritual well-being and its subscales ($p > 0.05$).

In the present study, according to the Friedman test, there was a significant difference among factors associated with opiate addiction relapse ($p < 0.001$). The most important factors in relapse of addiction were relation with an addict friend, unemployment, living expenses, and family conflicts [Table/Fig-2].

Furthermore, in regards to the history of relapse, a multivariate test (Wilks' lambda) showed a significant difference in spiritual well-being and its subscales ($WL = 0.659$, $F = 79.978$, $p < 0.001$) and the patients with addiction relapse had lower scores [Table/Fig-3].

DISCUSSION

According to the findings of the study, relation with an addict friend, unemployment, living expenses, and family conflicts were the most important factors in relapse of addiction. In addition, most of participants were previously under treatment with Methadone Maintenance Therapy (MMT) and were opium users. Zhou K and Zhuang G in a review article found that socio-demographics, support system, social function, economic status and psychological status are associated with retention in MMT [23]. Yang F et al., showed that age, relationship with family, support from family or friends and income were

	With Relapse	Without Relapse	F	p-value
	Mean \pm SD	Mean \pm SD		
Religious well-being	33.88 \pm 8.11	44.92 \pm 7.74	151.41	<0.001
Existential well-being	32.08 \pm 7.46	41.18 \pm 8.73	97.98	<0.001
Spiritual well-being	65.96 \pm 13.92	86.10 \pm 14.85	152.62	<0.001

[Table/Fig-3]: The spiritual well-being and its subscales in patients with and without relapse.

*Multivariate test (Wilks' lambda) ** p-value less than 0.05 considered significant

predictors of MMT retention [24]. Furthermore, Mirzaei T et al., and Din Mohammadi M et al., in their study verified that relation with an addict friend, unemployment, pressure of living expenses, family conflicts, and accessibility of opiates were the most important factors in the relapse of addiction [6,18]. Unemployment as a social phenomenon underlies many distortions especially addiction. Unemployment generates numerous moral deviations and poverty because unemployed people are unable to meet financial demands. Hosseini S et al., in their study revealed that employment status and change in income are two aetiologic factors in relapse of addiction [25].

Gyarmathy VA and Latkin CA suggest that friends may play critical positive and supportive roles in encouraging drug users to treatment retention [26]. In contrast, they could be considered as a negative factor in relapse and tendency to addiction. Addicted friends tend to affect their friends. These contradictory roles are dependent on different factors such as patients personality problem, low self-esteem, temptation to experience a new thing (opiate), and family problems especially lack of family supports and emotional problems which cause the tendency towards and dependency on friends.

In the present study, somatic pain was one of the important factors in relapse of addiction. Opiates are frequently used in treatment of somatic pain; however, in some cases they are associated with drug abuse and addiction [26].

According to the findings of the study, family conflicts were the most important family factors in relapse of addiction. This result is consistent with the findings of Mirzaei T et al., and highlights the importance of supportive role of family members in relapse of addiction [6]. A study confirmed the role of family function in tendency to addiction which was in agreement with result of the present study [27].

Religion is one of the protective factors that facilitates positive outcomes by preventing individuals from engaging in addictive substance [28]. Generally, spirituality gives meaning to people's lives and is a coping resource in difficult condition [29]. Believing in God's presence and believing in a higher power that is component of spiritual health are predictors of positive outcomes in treatment of addiction [30].

In the present study, the patients with relapse history had lower spiritual well-being scores which indicate the probable role of spirituality on addiction relapse. Furthermore, the relationship between spirituality and addiction relapse have been confirmed in different studies. In a study conducted in Malaysia, spirituality was a powerful resource for getting rid of drug addiction and the usage of *Taqwa* (piety) was derived as a practical method of Islamic spiritual therapy [28]. Wills TA et al., believe that having religious beliefs and related spiritual practice could decline and prevent the high risk behaviours such as alcoholism and addiction and inhibit the daily living pressure that cause tendency to addiction [31]. Comfort and power of religious beliefs can contribute to people's health and sense of well-being [31] and decrease their stress and high risk behaviours [32]. However, Miller WR et al., found that spirituality have no supportive effect on addiction [33]. This inconsistency may be due to differences in the method of studies and differences in understanding of spiritual concepts in different cultures.

LIMITATION

The present study was conducted in a private withdrawal clinic; therefore, the researchers recommend a multi-center study with a larger sample size.

CONCLUSION

The findings of the present study indicates the necessity of paying attention to spiritual well-being, family, economical, personal, and occupational factors as crucial factors in opioid dependence relapse.

AUTHORS' CONTRIBUTION

Study concept and design; M.R. Noormohammadi, acquisition of data; M. Nikfarjam, analysis and interpretation of data; F. Deris, administrative, technical, and material support, drafting of the manuscript, and critical revision of the manuscript for important intellectual content; N. Parvin.

ACKNOWLEDGMENTS

This study was funded by Research and Technology Deputy at the Shahrekord University of Medical Sciences (grant no: 1770).

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PARTICULARS OF CONTRIBUTORS:

1. Associate Professor, Religious Teachings, Shahrekord University of Medical Sciences, Shahrekord, Iran.
2. Assistant Professor, Department of Psychiatry, Shahrekord University of Medical Sciences, Shahrekord, Iran.
3. Lecturer, Department of Epidemiology and Biostatistics, Shahrekord University of Medical Sciences, Shahrekord, Iran.
4. Lecturer, Department of Nursing, Shahrekord University of Medical Sciences, Shahrekord, Iran.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Mr. Neda Parvin,
Lecturer, Department of Nursing, Shahrekord University of Medical Sciences,
Rahmatiyeh, Shahrekord, Chaharmahal va Bakhtiari, Iran.
E-mail: np285@yahoo.com

FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **Jul 20, 2016**
Date of Peer Review: **Sep 19, 2016**
Date of Acceptance: **Nov 12, 2016**
Date of Publishing: **Mar 01, 2017**